

Application No. 09/713,780
Amendment dated August 31, 2004
Reply to Office Action of May 18, 2004

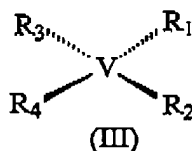
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-3. (canceled)

4. (currently amended) ~~The method of claim 1~~ A method for inhibiting angiogenesis in a non-cancerous tissue comprising administering to a subject an effective angiogenesis inhibiting amount of a vanadium compound having, wherein the vanadium compound has the following structure:



wherein

R₁ and R₂ are each independently a monodentate ligand or together form a bidentate ligand; and

R₃ and R₄ are each independently a cyclopentadienyl ring, wherein each cyclopentadienyl ring is optionally substituted with one or more (C₁-C₃)alkyl.

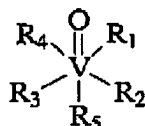
5. (withdrawn) The method of claim 4, wherein R₁ and R₂ are each independently a monodentate ligand selected from the group consisting of halo, OH₂, O₃SCF₃, N₃, CN, OCN, SCN, SeCN, and a cyclopentadienyl ring, wherein each cyclopentadienyl ring is optionally substituted with one or more (C₁-C₃)alkyl.

6. (withdrawn) The method of claim 5, wherein R₁ and R₂ are each independently halo.

7. (withdrawn) The method of claim 6, wherein halo is chloro, bromo, or iodo.

Application No. 09/713,780
Amendment dated August 31, 2004
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8. (withdrawn) The method of claim 6, wherein halo is chloro.
9. (currently amended) The method of claim 4, wherein R_1 and R_2 together form a bidentate ligand selected from the group consisting of acetylacetonate, 2,2' bipyridine, hexafluoroacetylacetonate, catecholate, diethyl dithio carbamate, N-phenyl benzohydroxamic acids, acethydroxamic acid, and salts ~~aeae, Bpy, Hfacae, Cat, Dte, PH, H and derivatives thereof.~~
10. (original) The method of claim 9, wherein the bidentate ligand is aeae or a derivative acetylacetonate or a salt thereof.
11. (withdrawn) The method of claim 1, wherein the vanadium compound has the following structure:



wherein

- R_1 and R_2 are each independently a monodentate ligand or together form a bidentate ligand;
- R_3 and R_4 together form a bidentate ligand; and
- R_5 is a monodentate ligand, or is absent.

12. (withdrawn) The method of claim 11, wherein R_1 and R_2 are each independently a monodentate ligand selected from the group consisting of halo, OH_2 , O_3SCF_3 , N_3 , CN, OCN, SCN, SeCN, and a cyclopentadienyl ring, wherein each cyclopentadienyl ring is optionally substituted with one or more (C_1-C_3) alkyl.

Application No. 09/713,780
Amendment dated August 31, 2004
Reply to Office Action of May 18, 2004

13. (withdrawn) The method of claim 12, wherein, R_3 and R_4 together form a bidentate ligand selected from the group consisting of acetylacetonate, 2,2' bipyridine, hexafluoroacetylacetonate, catecholate, diethyl dithio carbamate, N-phenyl benzohydroxamic acids, acethydroxamic acid, and salts acac, Bpy, Hfacac, Cat, Dto, PH, H and derivatives thereof.

14. (withdrawn) The method of claim 11, wherein R_1 and R_2 together form a bidentate ligand selected from the group consisting of acetylacetonate, 2,2' bipyridine, hexafluoroacetylacetonate, catecholate, diethyl dithio carbamate, N-phenyl benzohydroxamic acids, acethydroxamic acid, and salts acac, Bpy, Hfacac, Cat, Dto, PH, H and derivatives thereof.

15. (withdrawn) The method of claim 1, wherein said vanadium compound is:
VCp₂Cl₂, VCp₂Br₂, VCp₂I₂, VCp₂(N₃)₂, VCp₂(CN)₂, VCp₂(NCO)₂, VCp₂(NCO)Cl,
VCp₂(NCS)₂, VCp₂(NCSe)₂, VCp₂Cl (CH₃CN)(FeCl₄), VCp₂(O₃SCF₃)₂, V(MeCp)₂Cl₂,
V(Me₅Cp)₂Cl₂, VCp₂(acac), VCp₂(hf-acac), VCp₂(bpy), VCp₂(cat), VCp₂(dic), VCp₂PH, or
VCp₂H.

16. (withdrawn) The method of claim 1, wherein said vanadium compound is:
[VO(phen)], [VO(phen)₂], [VO(Me₂-phen)], [VO(Me₂-phen)₂], [VO(Cl-phen)], [VO(Cl-phen)₂], [VO(bipy)], [VO(bipy)₂], [VO(Me₂-bipy)], [VO(Me₂-bipy)₂], and [VO(Br,OH-acph)₂].

17-24. (canceled)

25. (currently amended) The method of claim 4 wherein the non-cancerous tissue is a vascular tissue.

26. (previously presented) The method of claim 16 wherein the vascular tissue is a coronary artery.

Application No. 09/713,780
Amendment dated August 31, 2004
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27. (currently amended) The method of claim ~~1~~ 4 wherein the non-cancerous tissue is a retina
28. (currently amended) The method of claim ~~1~~ 4 wherein the non-cancerous tissue is a tumor
29. (currently amended) The method of claim ~~19~~ 28 wherein the tumor is a hemangioma.
30. (new) The method of claim 25, wherein the angiogenesis is associated with injury to the vascular tissue.
31. (new) The method of claim 30, wherein the angiogenesis is associated with restenosis following injury to the vascular tissue.
32. (new) The method of claim 25, wherein the vascular tissue is a vessel.
33. (new) The method of claim 32, wherein the vessel is a coronary artery.
34. (new) The method of claim 32, wherein the injury to the vessel is associated with balloon angioplasty, vessel stent, rotational and directional atherectomy, or laser angioplasty.
35. (new) The method of claim 27, wherein the angiogenesis is associated with retinopathy.
36. (new) The method of claim 35, wherein the retinopathy is associated with diabetes.